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UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

In re	Chapter 11
TRONOX INCORPORATED, *et al.*,	Case No. 09-10156 (ALG)
Debtors.	Jointly Administered
TRONOX INCORPORATED, TRONOX WORLDWIDE LLC f/k/a Kerr-McGee Chemical Worldwide LLC, and TRONOX LLC f/k/a Kerr-McGee Chemical LLC,	Adv. Pro. No. 09-01198 (ALG)
Plaintiffs,	
v.	**DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF THEIR MOTION TO EXCLUDE THE TESTIMONY OF DR. NEIL M. RAM UNDER FEDERAL RULE OF EVIDENCE 702**
ANADARKO PETROLEUM CORPORATION and KERR-MCGEE CORPORATION, KERR-MCGEE OIL & GAS CORPORATION, KERR-MCGEE WORLDWIDE CORPORATION, KERR-MCGEE INVESTMENT CORPORATION, KERR-MCGEE CREDIT LLC, KERR-MCGEE SHARED SERVICES COMPANY LLC, AND KERR-MCGEE STORED POWER COMPANY LLC	
Defendants.	
THE UNITED STATES OF AMERICA,	
Plaintiff-Intervenor,	
v.	
TRONOX, INC., TRONOX WORLDWIDE LLC, TRONOX LLC, KERR-MCGEE CORPORATION and ANADARKO PETROLEUM CORPORATION,	
Defendants.	

Defendants Anadarko Petroleum Corporation, Kerr-McGee Corporation, Kerr-McGee Oil & Gas Corporation, Kerr-McGee Worldwide Corporation, Kerr-McGee Investment Corporation, Kerr-McGee Credit LLC, Kerr-McGee Shared Services Company LLC and Kerr-McGee Stored Power Company LLC ("Defendants") respectfully submit Defendants' Memorandum Of Law In Support Of Their Motion To Exclude The Testimony Of Dr. Neil M. Ram Under Federal Rule Of Evidence 702.

I.
INTRODUCTION

Plaintiffs Tronox and the United States claim that Tronox's contingent environmental liabilities at [redacted] totaled somewhere between [redacted] and [redacted] at the time of its IPO on November 28, 2005. In support of their claim, Plaintiffs plan to introduce the testimony of one engineer, Dr. Neil M. Ram of Roux Associates, [redacted]. But under Federal Rule of Evidence 702, Dr. Ram's testimony [redacted] is inadmissible because it is not the product of principles and methods "reliably applied … to the facts of the case." Fed. R. Evid. 702.

What makes estimating the past value of assets or liabilities different from (and harder than) estimating their present value is a single, necessary constraint on the analysis. The value of something as of a date in the past must take into account only facts or data known or knowable on that date. An expert whose estimate relies upon facts or data from after the valuation date does not estimate value *as of that date* but instead estimates value *as of some time after*.

Dr. Ram did not reliably apply that principle of retrospective valuation. [redacted]

[redacted]

Other facts underscore the unreliability of Dr. Ram's testimony. [redacted] he could not explain concepts fundamental to his opinion. And he committed errors [redacted]

For these reasons, the Court should hold that Dr. Ram's opinions about Tronox's contingent environmental liabilities cannot be introduced at trial.

II.
LEGAL BACKGROUND

A. Rule 702 Bars Testimony Of Experts Who Do Not Apply Principles And Methods Reliably.

Under Federal Rule of Evidence 702, an expert's opinion is admissible only if it is the product of reliable principles and methods reliably applied to the facts of the case. *See* Fed. R. Evid. 702; *see also Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993); *Kumho Tire Co.*

v. Carmichael, 526 U.S. 137 (1999). The testimony's proponent must establish its admissibility. *See United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007). In administering the rule, a trial court must "make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho Tire*, 526 U.S. at 152. This requires "more than simply 'taking the expert's word for it.'" Fed. R. Evid. 702 Advisory Committee's Note (2000) (quoting *Daubert v. Merrell Dow Pharms., Inc.*, 43 F.3d 1311, 1319 (9th Cir. 1995)) (hereinafter "Rule 702 Advisory Committee Note"). The court must perform "a rigorous examination of … how the expert applies the facts and methods to the case at hand." *Amorgianos v. Nat'l R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002).

Rule 702 is not meant to substitute for adversarial methods of testing truth. *See Daubert*, 509 U.S. at 596. Thus, when examining testimony for compliance with Rule 702, the court should distinguish between major and minor flaws in the expert's application of principles and methods. While minor flaws undermine an expert's credibility, major flaws undermine his reliability. *See Amorgianos* 303 F.3d at 267. The difference turns on the nature of the flaw and how close it is to the heart of the expert's opinion. A flaw is not minor just because it happens at one step in a multistep analysis, for "any step that renders the analysis unreliable under the *Daubert* factors renders the expert's testimony inadmissible." *Celebrity Cruises, Inc. v. Essef Corp.*, 434 F. Supp.2d 169, 176 (S.D.N.Y. 2006) (internal quotation marks omitted).

There is no doubt that Rule 702 applies in a bench trial. *See Metavante Corp. v. Emigrant Sav. Bk.*, 619 F.3d 748, 760 (7th Cir. 2010) (citing cases). Some courts have stated that a judge in a bench trial need not rule on Rule 702 objections before trial because there is no jury that might be influenced by unreliable testimony. *See, e.g., Joseph S. v. Hogan*, 2011 WL

2848330, at *2–*3 (E.D.N.Y.). Yet, while pretrial resolution of Rule 702 objections may be "*generally* less efficient than simply hearing the evidence" in a bench trial, *Victoria's Secret Stores Brand Mgmt. v. Sexy Hair Concepts, LLC*, 2009 WL 959775, at *6 n. 3 (S.D.N.Y.) (emphasis added), it will be more efficient in some cases. This is one of those cases. The upcoming trial will be complex and will require substantial time and resources. Excluding Dr. Ram's testimony would greatly simplify the trial and avoid a significant waste of time.

B. Hindsight Cannot Be Used To Determine Value As Of A Past Date.

The date as of which assets or liabilities are being valued "is critically important because circumstances can cause values to vary materially from one date to another, and the valuation date directly influences data available for the valuation." Pratt, *Valuing A Business*, p. 39 (5th ed. 2008) (hereinafter "Pratt"). When the valuation date is in the past, the determination of value must not be influenced by information from after that date, no matter how enlightening it may be. The Supreme Court has explained why:

> The first impression is that it is absurd to resort to statistical probabilities when you know the fact. But this is due to inaccurate thinking. … [T]he value of property at a given time depends upon the relative intensity of the social desire for it at that time, expressed in the money that it would bring in the market. Like all values, as the word is used by the law, it depends largely on more or less certain prophecies of the future; and the value is no less real at that time if later the prophecy turns out false than when it comes out true. Tempting as it is to correct uncertain probabilities by the now certain fact, we are of opinion that it cannot be done.

Ithaca Trust Co. v. United States, 279 U.S. 151, 155 (1929) (Holmes, J.) (citations omitted). "[T]he exercise of judgment in hindsight," in other words, "conflict[s] with basic economics." *In re Hannover Corp.*, 310 F.3d 796, 802 (5th Cir. 2002).

In a fraudulent transfer case like this one, then, assets and liabilities must be valued based upon "information known or knowable as of the date of the challenged transfer." *In re Heritage*

Org., LLC, 375 B.R. 230, 284 (Bankr. N.D. Tex. 2007); *In re Commer. Fin. Servs.*, 350 B.R. 520, 541 (Bankr. N.D. Okla. 2005). All other information is impermissible hindsight. A fact about the state of the world on the valuation date is not knowable on that date just because, in theory, it could have been discovered if someone had looked. For example, "[t]he discovery of oil" under a parcel of property "is the kind of 'subsequent event' that the rule [against hindsight] makes inadmissible, for it is beyond the contemplation of the parties on the relevant valuation date" even though the oil *must* have been there at all relevant times. *First Nat'l Bk. of Kenosaha v. United States*, 763 F.2d 891, 894 (7th Cir. 1985).

In maintaining the "delicate balance" between "consider[ing] only evidence in foresight, and not hindsight," courts typically bar all information from after the valuation date, but occasionally make an exception for information from "some short time period" after if it tends to show what people knew or anticipated on the valuation date. *Boyce v. Soundview Tech. Group, Inc.*, 464 F.3d 376, 389 (2d Cir. 2006); *see First Nat'l Bk. of Kenosha*, 763 F.2d at 894 ("[C]ourts have not been reluctant to admit evidence of actual sales prices received for property after [the valuation date], so long as the sale occurred within a reasonable time after [that date] and no intervening events drastically changed the value of the property."). Information from long after the valuation date, by contrast, is irrelevant hindsight because it does not tend to show what contemporaneous buyers and sellers knew or anticipated on the valuation date, that is, how they would have valued an asset or liability as of that date. *See id.* ("The rule against admission of subsequent events is, simply stated, a rule of relevance. … Under this traditional definition of relevance, evidence of most subsequent events would be excluded.").

III.
ARGUMENT

A. Dr. Ram Did Not Reliably Avoid Considering And Using Hindsight

[redacted]

Dr. Ram's methodology for valuing Tronox's contingent environmental liabilities [redacted] compounds the hindsight problem. [redacted] Plaintiffs have a heavy burden under Rule 702 to prove that he reliably avoided the influence of hindsight in forming his judgments.

Plaintiffs cannot carry their heavy burden under Rule 702. [redacted]

[redacted]

[redacted]

Dr. Ram's inattention to this critical component of the analysis likely stems from his inexperience with retrospective valuations. [redacted]

[redacted]

In short, Dr. Ram's opinion in this case is unreliable because he did not reliably apply the fundamental principle of retrospective valuation. [redacted] His testimony should be excluded as unreliable. *See In re Med Diversified, Inc.*, 334 B.R. 89, 98 (Bankr. E.D.N.Y. 2005) (excluding valuation expert "because he showed a discernible measure of negligence in purportedly applying the alleged professional standards and techniques"). [redacted] Rule 702 requires "more than simply 'taking the expert's word for it.'" Rule 702 Advisory Committee Note; *see In re Med Diversified*, 334 B.R. at 102 (excluding valuation expert who loaded his opinion "with multiple *ipse dixits*"). Because it appears that hindsight in fact influenced Dr. Ram and because Plaintiffs have no way to prove that he did not

use hindsight, the Court cannot conclude that he reliably applied the appropriate principles and methods to this case. *See Lippe v. Bairnco Corp.*, 288 B.R. 678, 689 (S.D.N.Y. 2003), *aff'd* 99 Fed. Appx. 274 (2d Cir. 2004) (excluding valuation expert whose "opinions are based largely on his experience" but who made "no effort to explain how his conclusions were reached, why the conclusions have a factual basis, or how his experience is reliably applied").

B. Dr. Ram Selected An Inferior Valuation Methodology Without Sufficient Reason And Misapplied It.

[redacted]

[redacted]

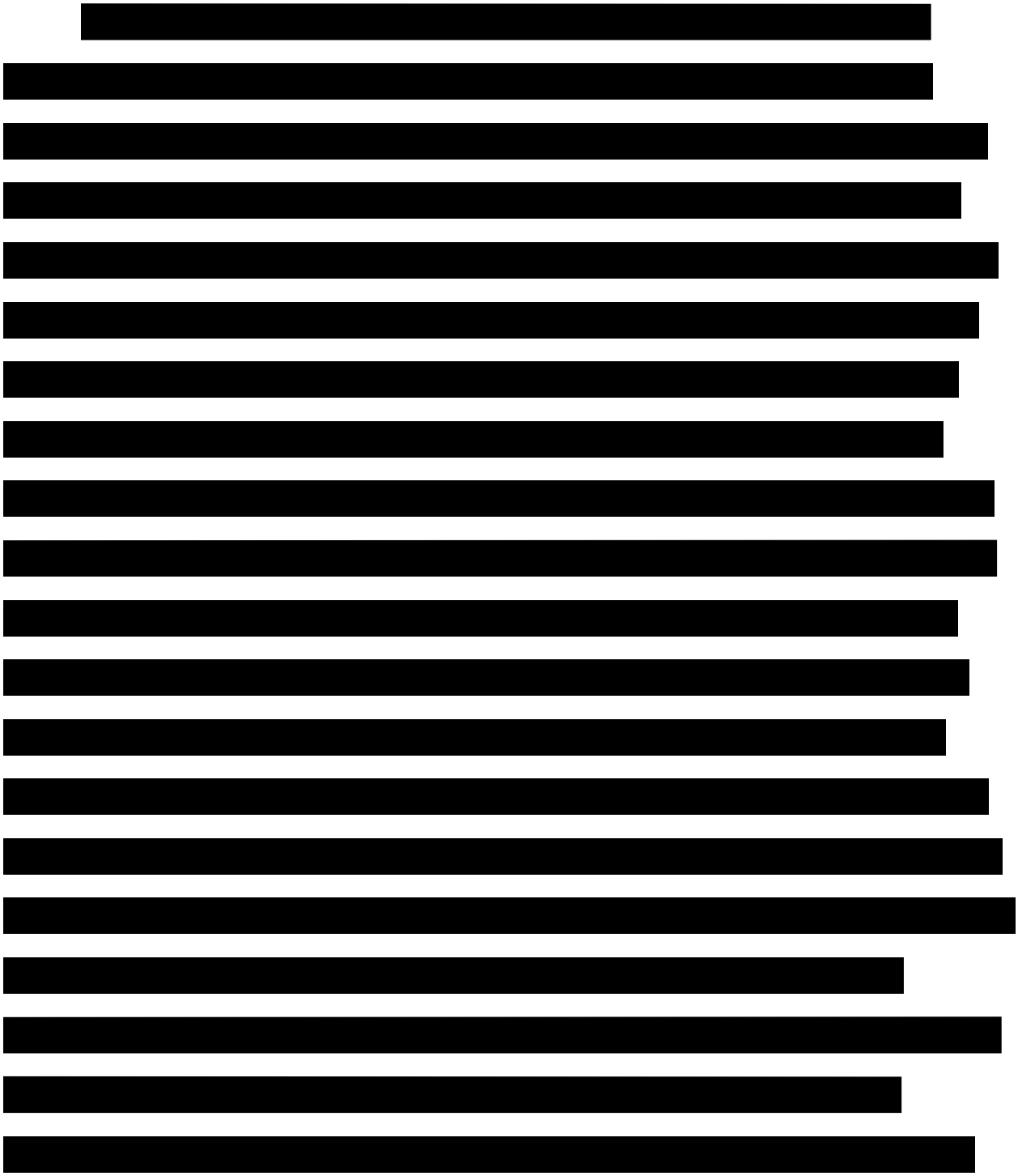
[redacted]

[redacted] His testimony should be excluded. *See Lippe*, 288 B.R. at 689–694 (excluding valuation expert whose testimony was "based largely on his experience" and who failed to use "the most reliable method for determining the value of a business"); *see also In re Med Diversified, Inc.*, 334 B.R. at 98–102 (excluding valuation expert for not considering the widely accepted valuation methodology).

C. Dr. Ram Does Not Understand The [redacted] Principles He Supposedly Applied.

[redacted] it became clear that Dr. Ram does not understand [redacted]. His unfamiliarity with the very concepts he supposedly applied renders his opinion unreliable and inadmissible. *See Lippe*,

288 B.R. at 689–694 (excluding valuation expert who was unfamiliar with established valuation principles and methods, failed to consider important variables, and committed several errors).



Second, Dr. Ram could not articulate the difference between [redacted] And he did not know whether [redacted] It is a simple distinction, and Dr. Ram's failure to understand it further undermines the reliability of his analysis.

Finally, Dr. Ram committed at least two errors [redacted]

[redacted]

IV.
CONCLUSION

Under Rule 702, the Court should exclude Dr. Ram's testimony about Tronox's contingent environmental liabilities.

March 16, 2012

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on March 16, 2012, a true and correct copy of the foregoing was served on the following counsel of record by ECF and/or as indicated below:

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